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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,024

06/25/2003

R. Victor Klassen

D/A221811

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25453 7590 06/21/2007
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EXAMINER

ROHWER, JACOB P

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

06/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/606,024

Applicant(s)

KLASSEN ET AL.

Examiner

Jacob P. Rohwer

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See attached.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No 7,046,391 to Barry et al.

Regarding claim 1, Barry discloses a method of operating a printing system (**Col 2 Lin 61-67**) for parallel processing a print job with a plurality of processing nodes (**Fig 3a Col 5 Lin 32-35 discloses an RIP processor associated with a single print engine and furthermore Fig 27 discloses further processing associated with an individual printer in an environment constituting a plurality of printers**) into a printer-ready format for printing the print job, said processing nodes communicating with a virtual disk transfer system, (**Col 17 Lin 19-42 and Col 18 Lin 28-33 discloses storing rasterized pages on disk using virtual stacks in order to be distributed to printers.**) comprising:

splitting the print job into a plurality of job chunks; (**Col 4 Lin 21-55, Fig 1**)

assigning the job chunks to respective processing nodes for processing the job chunks into the printer-ready format; (**Fig 9 and Fig 27, Col 12 Lin 57-60**) and

monitoring available space in the virtual disk transfer system. (Col 20 Lin 32-50, Fig 19, Col 24 Lin 65—Col 25 Lin 10 discloses managing the available space in memory used to transfer the rasterized page data.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable Barry et al as specified in claim 1 above, in view of US Patent No 6,038,033 Bender et al.

Regarding claim 2, Barry discloses monitoring the available space in memory as specified in the rejection of claim 1 above, and further preventing the storage of selected chunks from being added to the transfer system. (Fig 19, Col 24 Lin 65—Col 25 Lin 10)

Barry does not expressly disclose that the prevention is based on when available space falls below a predetermined **threshold**.

However, Bender discloses a system for transferring print data in accordance with available buffer space, wherein certain measures are implemented in order to account for available space based on threshold levels. (Col 4 Lin 6-10 and Fig 3)

At the time of the invention it would have been obvious to use threshold values as specified in Bender, in order to determine if job chunks should be withheld as specified in Barry. Threshold values with regard to managing the transfer of data in

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relation to available memory space are very common within the art and furthermore, the threshold value could mean that the buffer is full, in which instance the system must withhold any further data to be transferred.

The suggestion/motivation for doing so would have been to allow the system to run more efficiently while monitoring the transferring and concurrent processing of the image data. **(Bender Col 4 Lin 6-10)**

Therefore, it would have been obvious to combine the Barry and Bender Patents in order to obtain the invention as specified in claim 2.

Regarding claim 3, Barry further discloses the method defined in claim 2, wherein the splitting step is performed by a splitter **(Fig 15 #424 and #422 allocate resources and engines)** and further comprising the step of withholding chunk destinations from the splitter. **(Col 20 Lin 32-50 discloses the destination is managed based on available resources, such as memory, therefore a job is not split by the splitter if available resources are not available.)**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob P. Rohwer whose telephone number is 571-272-5509. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jacob P Rohwer
Assistant Examiner
Art Unit 2625

*** ~~REDACTED~~

JR
6/12/07

A. S. MOE
AUNG S. MOE
SUPERVISORY PATENT EXAMINER
6/15/07